

Claims

What is claimed is:

- 1 1. An apparatus, including:
2 an amplifier to produce an output signal and to receive an input signal
3 including an adjustable phase to be adjusted in response to an indication of an
4 amplitude of the output signal to reduce a phase distortion.
- 1 2. The apparatus of claim 1, further including:
2 an envelope detector to detect the indication of the amplitude.
- 1 3. The apparatus of claim 1, further including:
2 a varactor, wherein the adjustable phase is to be adjusted by translating
3 the indication of the amplitude into a control signal to control the varactor.
- 1 4. The apparatus of claim 1, further including:
2 a translation circuit to transform the indication of the amplitude into a
3 control signal to adjust the adjustable phase.
- 1 5. The apparatus of claim 4, wherein the translation circuit is to provide a
2 loop gain of less than about one.
- 1 6. The apparatus of claim 4, wherein the translation circuit includes at least
2 one of an offset circuit, a gain circuit, and/or a law conformance circuit.
- 1 7. 7. The apparatus of claim 1, wherein at least a portion of the amplifier
2 includes complementary metal oxide semiconductor (CMOS)
3 technology.
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1 8. An apparatus, including:
2 a first stage including a first amplifier responsive to a first input signal; and
3 a second stage coupled to the first stage, the second stage including a second
4 amplifier responsive to a second input signal, wherein the second input signal
5 includes an adjustable phase to be adjusted in response to an indication of an
6 amplitude of an output signal to reduce a phase distortion, and wherein the first
7 input signal includes an adjustable amplitude to be adjusted to reduce an
8 amplitude distortion.

1 9. The apparatus of claim 8, wherein the second stage is to provide the
2 output signal.

1 10. The apparatus of claim 8, further including:
2 a third stage including a third amplifier to provide the output signal,
3 wherein the third stage is coupled to the second stage.

1 11. A system, including:
2 an amplifier to produce an output signal and to receive an input signal
3 including an adjustable phase to be adjusted in response to an indication of an
4 amplitude of the output signal to reduce a phase distortion of the amplifier; and
5 an omnidirectional antenna coupled to the amplifier.

1 12. The system of claim 11, further including:
2 a translation circuit to transform the indication of the amplitude into a
3 control signal to adjust the adjustable phase.

1 13. The system of claim 12, further including:
2 a tuning element selected from a capacitor and an inductor, the tuning
3 element to receive the control signal to adjust the adjustable phase.

1 14. The system of claim 11, wherein the adjustable phase is capable of being
2 adjusted while leaving a signal amplitude associated with the amplifier
3 substantially unchanged.

1 15. The system of claim 11, wherein the phase distortion of the amplifier is
2 capable of being reduced while a power output of the amplifier is
3 increased from a first selected level to a second selected level.

1 16. A method, including:
2 detecting an indication of an amplitude of an output signal of an
3 amplifier; and
4 adjusting a phase of an input signal of the amplifier responsive to the
5 indication to reduce a change in a phase of the output signal.

1 17. The method of claim 16, wherein detecting the indication of the
2 amplitude of the output signal further includes:
3 detecting an envelope of the amplitude of the output signal.

1 18. The method of claim 16, wherein detecting the indication of the
2 amplitude of the output signal further includes:
3 detecting a peak value of the amplitude of the output signal.

1 19. The method of claim 16, wherein the indication of the amplitude of the
2 output signal includes an output signal power value.

1 20. The method of claim 16, wherein adjusting the phase of the input signal
2 further includes:
3 reducing the change in the phase of the output signal.

1 21. The method of claim 16, wherein adjusting the phase of the input signal
2 further includes:
3 reducing a change in the amplitude of the output signal.

1 22. An article comprising a machine-accessible medium having associated
2 information, wherein the information, when accessed, results in a
3 machine performing:
4 detecting an indication of an amplitude of an output signal of an
5 amplifier; and
6 adjusting a phase of an input signal of the amplifier responsive to the
7 indication to reduce a change in a phase of the output signal.

1 23. The article of claim 22, wherein adjusting the phase of the input signal
2 further includes:
3 controlling a variable tuning element selected from a capacitor and an
4 inductor at the input of an amplification stage included in the amplifier.

1 24. The article of claim 22, wherein the amplifier is included in a first stage,
2 and wherein the information, when accessed, results in the machine
3 performing:
4 adjusting a bias value of an amplification stage included in the amplifier
5 to reduce amplitude distortion included in the output signal.

1 25. The article of claim 22, wherein the amplifier includes at least two
2 stages.

1 26. An apparatus, including:
2 a first stage including a first amplifier responsive to a first input signal;
3 a second stage coupled to the first stage, the second stage including a second
4 amplifier responsive to a second input signal, wherein the second input signal

5 includes an adjustable phase to be adjusted in response to an indication of an
6 amplitude of an output signal to reduce a phase distortion, and wherein the first
7 input signal includes an adjustable amplitude to be adjusted to reduce an
8 amplitude distortion;
9 a translinear circuit to be coupled to the second input signal and to the
10 indication, and to adjust the adjustable phase; and
11 a third stage including a third amplifier to provide the output signal, wherein
12 the third stage is coupled to the second stage.

1 27. The apparatus of claim 26, wherein the translinear circuit is to
2 approximate a mathematical function.

1 28. The apparatus of claim 26, further including:
2 a varactor to couple the translinear circuit to the second input signal.